

Foreign & News Notes

P. O. Box 373,
Bloemfontein,
South Africa,
2nd Sept., 1941.

The Secretary,
Soaring Society of America,
P. O. Box 71,
Elmira, N. Y.

Dear Sir:

My Jan.-Feb. and Mar.-Apr. issues of SOARING have just come to hand, bringing as they always do a breath of action and creating an irresistible urge to kick over the traces. The delicate subject of the Government ban on all civil flying has already been conveyed to you by my late lamented compatriot, Frank Hatfield (article in SOARING, Dec., 1940) rendering further explanation unnecessary. Frank Hatfield was a pillar of strength to the movement in this country, and his recent death in a flying accident has robbed us of one of the staunchest, most progressive and enthusiastic devotees. It is not clear what happened, but it appears that he was a passenger in a 'plane which endeavored to cross a high range in exceptionally severe weather. There was no survivor so we shall never know exactly what occurred.

We never even see a glider or a sailplane any more, which is dismal, but we cherish high hopes that the military authorities will put the craft that they now have to the best use, and keep the flame of enthusiasm burning bright among their personnel. The enclosed press clipping is encouraging.

I suppose it is not quite in place to venture comment on the article in your Jan.-Feb. issue by Ralph Barnaby, but I cannot refrain from expressing admiration at the moderate yet firm view expressed, and at his calculated degree of restraint. Little as we know of your problem, we do know the necessity for united and wise government of the movement, and as far as the S. S. A. is concerned, may your shadow never grow less. When the day comes for us all to resume where we left off, it will be essential for control to be in seasoned hands, and free from any dissension. When it is borne in mind that your country is today almost the only one in which gliding is developing without restraint, your Society is enjoying the unique opportunity to forge ahead toward world leadership.

Yours faithfully,
(Signed) L. S. Emary.

FIRST MILITARY GLIDING UNIT

S. AFRICA'S LEAD TO
EMPIRE AVIATION
FEATURE OF THE AIR
COMMANDO

(By a Special Correspondent)

South Africa boasts the only military gliding unit in the British Commonwealth. It has now got over its "teething troubles,"

and its instructors, among whom are numbered some of the best-known names in South African gliding circles, will give spectacular exhibitions in their most up-to-date aircraft during the Air Commando display in Bloemfontein next week-end.

Last year representatives of the South African Gliding Association approached the S. A. A. F. and offered to put the facilities of the gliding movement at the Air Force's disposal for the duration of the war. All gliding aircraft were taken over in November of last year.

Far-sighted senior officers of the South African Air Force decided that a military gliding unit had considerable possibilities, and such a unit was accordingly started at Quagga-poort, the home of gliding and soaring in this country.

Many Difficulties

Dozens of machines were assembled there, and the members of the unit, for which the best-known gliding experts in the Union were recruited, set to work. There were many difficulties to be overcome. Months were spent in laboriously developing equipment capable of replacing the obsolete system of elastic catapult-launching which has been used for years at Quagga-poort. The system of launching sailplanes and gliders to heights of 1,000 to 1,500 feet, which had been employed by the advanced clubs in other parts of the world, was developed still further. The unit devised remarkable mechanical winches and special equipment to cope with the problems of mass training. This equipment is unique, and when the first school of air pupils went into action recently, it was found to operate flawlessly. This special winch system is as near fool-proof as any man-devised equipment can be.

When training with the winch system, pupils are taught to think of the ground first. They are under complete control all the time. An elaborate system of signals on a field telephone device and a wire cable in the hand of experts ensures that at no stage are they allowed to glide higher than their capacities.

Short Flips

At first they are permitted flips of only a few feet above the ground. When they have satisfied their instructors that they know how to manage their aircraft they are gradually allowed to fly to greater altitudes. Eventually they learn to turn right, left and right angle, and also how to make U-turns and circles. They also learn to touch down and land in a circle 60 yards in diameter, and later they are expected to be able to land accurately on a flag stretched on the ground.

Having mastered the art of gliding—which is a considerable accomplishment—they pass to soaring flight in sailplanes and to the more advanced techniques.

The new military unit does not for a moment pretend that gliding or soaring is superior to motorized flight, but it considers that gliding can play a useful, even if small, part in the training of efficient pilots. It is following the policy once

enunciated by Sir Pierre van Ryneveld when he stated at a public banquet that a pilot who spent his spare time gliding was probably a better pilot than one who spent his spare time at other pursuits, in the same way that a cavalry man who played polo was calculated to be a better horseman than one who rode only during his periods of training and exercise.

Differences in Aptitude

Peculiar differences in aptitude have been discovered among the first batches of pupils, all of whom, however, have revealed the inherent liking South Africans seem to have for the air. They have reached the exciting stages of their career in glider training, when, as novices, they are allowed to rise to considerable altitudes.

The initial stages of gliding are among the most memorable and exhilarating of a pilot's experiences, and the first members of the military gliding unit are enjoying themselves to the full.

Meanwhile the air at Quagga-poort rings with the technicalities of gliding, which has a jargon of its own almost incomprehensible to the lay mind. Pupils, eyeing the frail craft, were inclined to be suspicious at first, but their almost lyrical accounts of the school's activities have resulted in their friends beginning to show up at Quagga-poort to learn for themselves more about this strange bird-like craft.

The school has greatly increased its equipment since the old club days. Military trucks have replaced the battered motor relics which traditionally grace gliding fields all over the world, and the whole atmosphere is one of quiet efficiency always associated with the South African Air Force.

The Quagga-poort school is largely in the nature of an experiment, which will be carefully watched by aviation authorities not only in South Africa, but in other parts of the Commonwealth.

ATMOSPHERIC TURBULENCE

(Continued from page 5)

THERMAL CONVECTION UNDER DRY AIR CONDITIONS: On a normal, clear, summer day the sunshine rapidly warms the ground. The temperature increases after sunrise, gradually at first and then more rapidly until the maximum temperature is reached shortly after noon, usually between 2 and 3 p.m. Then as the sun gets lower in the sky, the outward radiation from the earth exceeds the incoming radiation from the sun so that the surface temperature drops, at first rapidly, then more slowly. At night when clouds are absent, radiation from the surface out into space induces continued cooling until the minimum temperature is reached about dawn.

This leads to a more or less regular diurnal variation in temperature of the surface. Air which is in direct contact with the surface partakes of its temperature changes through conduction of heat, hence the lower air which is subject to mixing by the action of turbulence will undergo a cycle of thermal changes like the sur-

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